

## **4.9 ENVIRONMENTAL JUSTICE**

This section analyzes the distributional patterns of high-minority and low-income populations on a regional basis and characterizes the distribution of such populations as they relate to the proposed Project and alternatives. This analysis focuses on whether the proposed Project's impacts have the potential to affect high-minority population(s) and low-income communities disproportionately, thus creating an adverse environmental justice impact.

### **4.9.1 Environmental Setting**

The proposed cable route and alternatives would travel from Moss Landing (Monterey Bay, California) towards the northwest, to the north of Monterey Canyon, and along the continental margin to the southeastern part of the Smooth Ridge. There is the potential for minority and low-income land-based populations and fisheries workers to exist in the area, which could be adversely and disproportionately impacted by the proposed Project and alternatives.

#### **Study Area**

For the purposes of defining the affected population area for employment characteristics, it is assumed that most fisheries workers would be willing to commute to Monterey Bay from Santa Cruz and Monterey Counties. Demographic totals of these counties presented as a whole are considered the study area.

#### **Minority Populations**

For the purposes of this analysis, U.S. Census Year 2000 minority population data is presented to characterize the ethnic makeup of the study area. The U.S. Census defines minorities as individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black not of Hispanic origin; or Hispanic. Table 4.9-1 provides population percentages for the minority populations of Santa Cruz and Monterey Counties. As shown in Table 4.9-1, Santa Cruz County contains a 25.2 percent minority population and Monterey County contains a 44.1 percent minority population. Within the study area as a whole, 36.7 percent of the population is considered minority.

**Table 4.9-1. Study Area Minority Population Profile**

County	2000 Population	Minority Population	Percent Minority
Santa Cruz	255,602	64,471	25.2
Monterey	401,762	177,080	44.1
<b>Study Area Total</b>	<b>657,364</b>	<b>241,551</b>	<b>36.7</b>

Source: 2000 U.S. Census

**Low-Income Populations**

The U.S. Census Bureau defines low-income populations by comparing the household income of a given area to that same area's weighted poverty thresholds established by the U.S. Department of Finance (U.S. Census, 2004). Table 4.9-2 presents the low-income population profile of the proposed project study area. As shown in Table 4.9-2, Santa Cruz County contains an 11.9 percent low-income population and Monterey County contains a 13.5 percent low-income population. Within the study area as a whole, 12.8 percent of the population is considered low-income.

**Table 4.9-2. Study Area Low-Income Profile**

County	2000 Population in Labor Force	Low-Income Population in Labor Force	Percent Low Income	Unemployment Rate
Santa Cruz	137,734	16,390	11.9	4.1
Monterey	184,789	24,947	13.5	5.2
<b>Study Area</b>	<b>322,523</b>	<b>41,337</b>	<b>12.8</b>	<b>4.8</b>

Source: 2000 U.S. Census

**Fishery Workers**

The U.S. Census Bureau does not have demographic data related to the fishery workers, because of the transient nature of the workers associated with the fishing industry. As such, for the purposes of this study, information on fishery workers was obtained from two recent reports addressing fisheries operations within Monterey Bay. The first is *Trends in Fisheries and Fishery Resources Associated With the Monterey Bay National Marine Sanctuary From 1981 – 2000* prepared for the MBNMS (Starr 2002). This report provides a brief description of the types of fisheries operating in the region encompassed by the MBNMS and a summary of fishery management operations. The second report is a study prepared for the Monterey County Office of Economic Development for the Moss Landing Harbor within Monterey Bay (Pomeroy 2003). The over-arching goal of the study was to document the social and economic value of the fishery industry and the issues, needs and concerns of its participants

(Pomeroy 2003). This study is included here because it provides detail on types and numbers of fisheries workers, which supplements the more general information available for the entire Bay and provided in the first study.

The Pomeroy study reports that Moss Landing, for which more specific data exists, supports 294 vessels, 979 fish receiving and processing workers, 11 fishing support business workers, and 10 harbor employees. Assuming these vessel-to-worker ratios are constant within the Bay, projections about the overall fisheries employment supported by Monterey Bay may be developed. As shown in Table 4.9-3, approximately 7.4 workers support each vessel operating out of Moss Landing. The Starr report states that the entirety of Monterey Bay supports 1,200 vessels. Assuming the same ratio (7.4 workers per vessel), Monterey Bay could support a total of 8,880 workers, with the distribution as noted in Table 4.9-3.

**Table 4.9-3. Estimated Fisheries Employment within Monterey Bay**

	<b>Moss Landing</b>	<b>Per Vessel</b>	<b>Total Monterey Bay*</b>
Vessels	294	n/a	1,200
Vessel Crew <sup>1</sup>	1,176	4	4,800
Fish Receiving and Processing Workers	979	3.3	3,996
Fishing Support Business Workers	11	.04	48
Harbor Employees	10	.03	36
<b>Total Fisheries Workers</b>	<b>2,176</b>	<b>7.4</b>	<b>8,880</b>

Sources: Starr 2002, Pomeroy 2003

\*Total workers for Monterey Bay were estimated, based on total number of vessels.

## **4.9.2 Regulatory Setting**

### **Federal**

On February 11, 1994, President Clinton issued an “Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” designed to focus attention on environmental and human health conditions in areas of high minority populations and low-income communities, and promote non-discrimination in programs and projects substantially affecting human health and the environment (White House 1994). The order requires the U.S. Environmental Protection Agency (EPA) and all other federal agencies (as well as State agencies receiving federal funds) to develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations.

<sup>1</sup> Typically, an average of one skipper and three deckhands per vessel is assumed.

In 1997, the U.S. EPA's Office of Environmental Justice released the Environmental Justice Implementation Plan, supplementing the EPA environmental justice strategy and providing a framework for developing specific plans and guidance for implementing Executive Order 12898. Federal agencies received a framework for the assessment of environmental justice in the EPA's Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis in 1998. This approach emphasizes the importance of selecting an analytical process appropriate to the unique circumstances of the potentially affected community. Minority populations, as defined by this Guidance Document, are identified where either:

- The minority population of the affected area is greater than fifty percent of the affected area's general population; or
- The minority population percentage of the area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

Consistent with the definition of minority populations, many environmental justice analyses in environmental review documents apply the 50 percent threshold to the identification of low-income populations as well. Specifically, low-income populations are identified where either:

- The low-income population of the affected area is greater than fifty percent of the affected area's general population; or
- The low-income population percentage of the area is meaningfully greater than the low-income population percentage in the general population or other appropriate unit of geographic analysis.

#### **State**

While many State agencies have utilized the EPA's *Environmental Justice Implementation Plan* as a basis for the development of their own environmental justice strategies and policies, as of yet the majority of California state agencies do not have guidance for incorporation of environmental justice impact assessment into CEQA analysis. However, the State of California has a number of legislative actions associated with environmental justice. Most appropriately, under Assembly Bill 1553 (signed in 2001), the Governor's Office of Planning and Research (OPR) is required to adopt guidelines for addressing environmental justice issues in local agencies' general plans. In addition, legislation establishing OPR as the "coordinating agency in state government for environmental justice programs" (California Government Code §65040.12) directs OPR to coordinate its efforts and share information regarding environmental justice programs with federal agencies, and to review and evaluate any

1 information from federal agencies that is obtained as a result of their respective  
2 regulatory activities. To this end, *Environmental Justice in California State Government*  
3 (*October 2003*) is a policy report prepared by OPR intended to provide a brief history of  
4 environmental justice, report on the status of OPR's efforts, and provide an outline of  
5 environmental justice findings, goals, and policies for future environmental justice efforts  
6 within State government.

7 The CSLC has developed and adopted an Environmental Justice Policy to ensure  
8 equity and fairness in its own processes and procedures. The CSLC adopted an  
9 amended Environmental Justice Policy on October 1, 2002, to ensure that  
10 "Environmental Justice is an essential consideration in the Commission's processes,  
11 decisions and programs and that all people who live in California have a meaningful  
12 way to participate in these activities." The policy stresses equitable treatment of all  
13 members of the public and commits to consider environmental justice in its processes,  
14 decision-making, and regulatory affairs. This policy is implemented, in part, through  
15 identification of, and communication with, relevant populations that could be adversely  
16 and disproportionately impacted by CSLC projects or programs, and by ensuring that a  
17 range of reasonable alternatives is identified that would minimize or eliminate  
18 environmental impacts affecting such populations. This discussion is provided in this  
19 document consistent with and in furtherance of the Commission's Environmental Justice  
20 Policy. The staff of the CSLC is required to report back to the Commission on how  
21 environmental justice is integrated into its programs, processes, and activities.

22 Although the OPR policy report, the CSLC Environmental Justice Policy, and State  
23 legislation provide useful background information and guidance on equitable treatment  
24 of environmental justice populations, no specific guidelines have been adopted at the  
25 State level to guide environmental justice analysis in CEQA environmental analysis  
26 documents. As such, State agencies have been using federal guidance to assess the  
27 environmental justice impacts of the projects under their review. Under AB 1553,  
28 signed into law in October 2001, the OPR is required to adopt guidelines for addressing  
29 environmental justice issues in local agencies' general plans. Currently, the OPR is in  
30 the process of updating the General Plan Guidelines to incorporate the requirements of  
31 AB 1553.

### 32 **4.9.3 Significance Criteria**

33 An environmental justice impact would be considered significant if the Project would:

- Result in a disproportionate impact on minority and/or low income populations at levels exceeding the corresponding medians for the county(s) in which the Project is located; or
- Result in a disproportionate decrease in the employment and/or economic base of minority and/or low-income populations (including the commercial and recreational fishing industry) working or residing in the county(s), cities and/or immediately surrounding areas that may be impacted by the Project.

#### 4.9.4 Impact Analysis and Mitigation

Identification of impacts related to environmental justice is not solely a matter of identifying whether there are high-minority and low-income populations that could be affected by a project. To determine if a project could *disproportionately* affect a high-minority or low-income population, it must also be determined how the project, and its potential alternatives, would affect other segments of the population. For example, if there are more high-income populations affected by a project than low-income populations, then the potential for disproportionate impacts on the low-income population, and thus the potential for environmental justice impacts, is low. If the proportion of low-income and high-minority populations impacted by a project is greater than the remainder of the population, then there is a greater potential for an environmental justice impact. For purposes of this analysis, the potential for disproportionalities to minority and low-income populations was assessed applying EPA's Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis as described above in Section 4.9.2 (Regulatory Setting).

#### **Impact EJ-1: Disproportionate Impacts on Minority and/or Low-Income Populations**

**Construction and operation of the proposed Project would not result in disproportionate impacts on minority and/or low-income populations.**

A number of technical sections in the EIR/EIS have identified less than significant impacts resulting from proposed Project construction and implementation. Significant but mitigable impacts associated with proposed Project construction and operations were identified for air quality, cultural resources, marine vessel transportation (cumulative), and noise. No significant and unavoidable impacts would occur as a result of the proposed Project.

In analyzing potential disproportionate environmental impacts of proposed Project construction and operation activities on minority populations and low-income

populations, an estimate of the potentially impacted population must be determined. Because the proposed Project would not result in any housing or business displacement impacts (refer to Section 5.7 – Effects Found Not to Be Significant) or intrude on any land-based development, potential impacts are limited to Monterey Bay fishery and support business workers. Table 4.9-3, Estimated Fisheries Employment within Monterey Bay, identifies an estimated total of 8,880 fishery and support business workers within the Monterey Bay area. However, data on the percentages of low-income and minority population within the fishing industry was not available. Using the EPA's guidance document threshold of fifty percent for minority and low-income workers employed within a representative area of the Monterey Bay fishing industry, a total of 4,440 workers would be considered the potentially affected population.

As indicated in Table 4.9-1, Study Area Minority Population Profile, the Project study area as a whole contains a total of 241,551 minority individuals resulting in 36.7 percent of the total study area population being minority. The worst-case scenario of 4,440 minority employees would account for 1.8 percent of the total minority population within the study area. Because the potentially affected minority population accounts for such a small percentage of the total minority population contained within the study area, environmental impacts associated with proposed Project construction or operations would not disproportionately affect minority populations in the study area.

As indicated in Table 4.9-2, Study Area Low-Income Profile, the Project study area as a whole contains a total of 41,337 low-income individuals resulting in 12.8 percent of the total study area population considered at the low-income level. The worst-case scenario of 4,440 low-income employees would account for 10.7 percent of the total low-income population within the study area. Because the potentially affected low-income population accounts for such a low percentage of the total low-income population contained within the study area, environmental impacts associated with proposed Project construction or operations would not disproportionately affect the low-income populations in the study area.

In addition to the low percentages of minority population and low-income populations potentially affected by proposed Project construction and operation activities, the proposed Project would not result in any significant unavoidable environmental impacts. Therefore, no disproportionate impacts on minority populations and low-income populations would result from proposed Project construction and operation activities.

## **Impact EJ-2: Disproportionate Decrease in Employment and/or Economic Base of Minority and/or Low-Income Populations**

**Construction and operation of the proposed Project would not result in a disproportionate decrease in employment and/or economic base of minority and/or low-income populations.**

The direct economic value of commercial fishing within MBNMS is estimated to be approximately \$15.7 million per year (values in inflation-year 2000 dollars) (Starr 2002). Because the cable would be buried over the majority of the route and only occupies a very small amount of habitat compared to the available fishing habitat, fishing would continue in historically fished areas following cable installation, and the implementation of the proposed undersea cabled observatory Project would not result in a decrease to the number or size of fishing operations operating within the waters of Monterey Bay. Therefore, the proposed Project would not result in any direct decrease to the number of employees in both fishing and support service businesses located within the study area.

Estimates of potential loss along the MARS cable were calculated for reductions in fish catch and associated income associated with the possibility that fishermen may elect to avoid fishing in the vicinity of the cable (Section 4.2, Commercial and Recreational Fisheries, Table 4.2-4). As stated in Section 4.2, Commercial and Recreational Fisheries, there would be no significant impact on the existing economic value of the fishery industry. Therefore, there would be no disproportionate decrease in employment of minority and/or low-income populations as a result of the proposed Project.

**Table 4.9-4. Summary of Environmental Justice Impacts and Mitigation Measures**

<b>Impact</b>	<b>Mitigation Measures</b>
<b>EJ-1:</b> Disproportionate Impacts on Minority and/or Low-Income Populations. (None)	None required.
<b>EJ-2:</b> Disproportionate Decrease in Employment and/or Economic Base of Minority and/or Low Income Populations. (None)	None required.

### **4.9.5 Cumulative Impacts**

A regional-scale environmental justice analysis such as the one conducted for the proposed Project considers existing minority and low-income demographic and population conditions of the entire study area. Proposed Project construction and operational impacts would not have disproportionate environmental impacts on low-



income and high minority populations. Therefore, it is unlikely that the proposed Project, in conjunction with other area projects identified in Table 4-1, would result in cumulatively considerable disproportionate impacts on the study area low-income and high minority populations.

#### 4.9.6 Alternative Landings

##### Alternative Landing Area 1: Duke Energy Pipeline to MBARI Property

Alternative Landing Area 1 would consist of the same undersea cable route as the proposed Project and would extend from Moss Landing on the shore of Monterey Bay to the northwest, and terminate at the southeastern part of the Smooth Ridge. This Alternative is similar to the proposed Project except that a portion of the shore landing would occur through an existing fuel oil pipeline owned by Duke Energy. The study area for environmental justice analysis would be the same as the proposed Project. This alternative would represent a slight decrease in the intensification of shore development along Monterey Bay. Because both the proposed Project and Alternative Landing Area 1 would not result in any housing or business displacement impacts or intrude on any land-based development, potential Environmental Justice impacts are limited to Monterey Bay fishery and support business workers. Like the proposed Project, construction and operation of Alternative Landing Area 1 would not generate significant unavoidable environmental health impacts such as those associated with air quality, noise, hazardous materials, and water quality. Because construction and operation would not result in significant environmental health effects, impacts associated with Alternative Landing Area 1 would be similar to the proposed Project, and would not result in disproportionate impacts on minority or low-income populations within the study area.

Construction activities associated with Alternative Landing Area 1 would result in the temporary blocked access to Moss Landing Harbor and the associated deep-draft mooring and fueling facility (refer to Section 4-7, Marine Vessel Traffic). Delays of several hours are anticipated and are considered significant and unavoidable. Mitigation Measures **MM MVT-5a** through **MM MVT-5c** and **MM MVT-6a** through **MM MVT-6c** presented in Section 4-7, Marine Vessel Traffic, would aid in alleviating the impacts of these delays. Because delays would be temporary (during construction only) and would not deter commercial fishing activities within the area (refer to Section 4.2, Commercial and Recreational Fisheries), Alternative Landing Area 1 is not anticipated to result in any direct decrease to the number of employees in both fishing and support service businesses located within the study area. Because Alternative Landing Area 1 would neither directly impact the Monterey Bay fishing industry nor its employees, there

would be no negative impact on the existing economic value or base. Therefore, there would be no disproportionate decrease in employment of minority and/or low-income populations as a result of Alternative Landing Area 1.

#### **Alternative Landing Area 2: Moss Landing Marine Laboratories (MLML) Pier**

Alternative Landing Area 2 would consist of the same undersea cable route as the proposed Project and would extend from Moss Landing on the shore of Monterey Bay to the northwest, and terminate at the southeastern part of the Smooth Ridge. This Alternative is similar to the proposed Project except that the shore landing would occur at the MLML located approximately 0.6 miles (1 km) south of the entrance to the Moss Landing harbor and no HDD would occur. The study area for environmental justice analysis would be the same as the proposed Project. Under Alternative Landing Area 2, the cable would cross the head of the Monterey Canyon near the entrance to the Moss Landing Harbor and extend south to the MLML. Because both the proposed Project and Alternative Landing Area 2 would not result in any housing or business displacement impacts or intrude on any land-based development, potential Environmental Justice impacts are limited to Monterey Bay fishery and support business workers. Like the proposed Project, construction and operation of the MLML Pier Alternative would not generate significant unavoidable environmental health impacts such as those associated with air quality, noise, hazardous materials, and water quality. Because construction and operation would not result in significant environmental health effects, impacts associated with Alternative Landing Area 2 would be similar to the proposed Project, and would not result in disproportionate impacts on minority or low-income populations within the study area.

Like Alternative Landing Area 1, construction activities associated with Alternative Landing Area 2 would result in the temporary blocked access to Moss Landing Harbor and the associated deep-draft mooring and fueling facility (refer to Section 4-7, Marine Vessel Traffic). Delays of several hours are anticipated and are considered significant and unavoidable. Mitigation Measures **MM MVT-5a** through **MM MVT-5c** and **MM MVT-6a** through **MM MVT-6c** presented in Section 4-7, Marine Vessel Traffic, would aid in alleviating the impacts of these delays. Because delays would be temporary (during construction only) and would not deter commercial fishing activities within the area (refer to Section 4.2, Commercial and Recreational Fisheries), Alternative Landing Area 2 is not anticipated to result in any direct decrease to the number of employees in both fishing and support service businesses located within the study area. Because Alternative Landing Area 2 would neither directly impact the Monterey Bay fishing industry nor its employees, there would be no significant impact on the existing economic value or base. Therefore, there would be no disproportionate decrease in

1 employment of minority and/or low-income populations as a result of Alternative  
2 Landing Area 2.

### 3 **No Project/Action Alternative**

4 The No Project Alternative would represent continuation of the existing effects of  
5 regional development patterns on high-minority and low-income populations, including  
6 the continuation of the existing impacts related to further development of the study area.  
7 Under the No Project Alternative, no adverse environmental impacts from the  
8 construction and operation of the proposed Project would occur. Under the No Project  
9 Alternative, the proposed MARS cable would not be installed and the cable would not  
10 come ashore at the landing site and connect to the MBARI laboratory facilities.  
11 Because the No Project Alternative would not result in significant environmental effects,  
12 no disproportionate impacts on minority or low-income populations within the study area  
13 would occur.

14 In addition, the No Project Alternative would not result in any direct decrease to the  
15 number of employees in both the fishing and support service businesses located within  
16 Monterey Bay and the study area. Because the No Project Alternative would neither  
17 directly impact the Monterey Bay fishing industry nor its employees, there would be no  
18 significant impact on the existing economic value or base. No disproportionate  
19 decrease in employment of minority and/or low-income populations would occur with the  
20 No Project Alternative.